

SEQUENCE LISTING

<110> Rothbarth, Karsten
 Stammer, Herman
 Werner, Dieter
 Nehls, Peter
 Deutsches Krebsforschungszentrum Stiftung Des
 Offentlichen Rechts

<120> Method for Triggering Apoptosis in Cells

<130> apoptosis

<140> 09/701,618

<141> 2001-02-14

<150> PCT/DE99/01684

<151> 1999-06-02

<150> DE 198 24 811.3

<151> 1998-06-03

<160> 10

<170> PatentIn Ver. 2.1

<210> 1

<211> 1156

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (118)..(540)

<223> Human C1D cDNA

<400> 1

ctttccggga gactggagtc gaaggccgtg agtatatttct aagccagtgt ttagagagta 60

tgtgaggcaa gactacctat agaaccggga ggagggtgag gagcagagct ggccata 117

atg gca ggt gaa gaa att aat gaa gac tat cca gta gaa att cac gag 165

Met Ala Gly Glu Glu Ile Asn Glu Asp Tyr Pro Val Glu Ile His Glu

1

5

10

15

tat ttg tca gcg ttt gag aat tcc att ggt gct gtg gat gag atg ctg 213

Tyr Leu Ser Ala Phe Glu Asn Ser Ile Gly Ala Val Asp Glu Met Leu

20

25

30

aag acc atg atg tct gtt tct aga aat gag ttg ttg cag aag ttg gat 261
Lys Thr Met Met Ser Val Ser Arg Asn Glu Leu Leu Gln Lys Leu Asp
35 40 45

cca ctt gaa caa gca aaa gtg gat ttg gtt tct gca tac aca tta aat 309
Pro Leu Glu Gln Ala Lys Val Asp Leu Val Ser Ala Tyr Thr Leu Asn
50 55 60

tca atg ttt tgg gtt tat ttg gca acc caa gga gtt aat cct aag gaa 357
Ser Met Phe Trp Val Tyr Leu Ala Thr Gln Gly Val Asn Pro Lys Glu
65 70 75 80

cat cca gta aaa cag gaa ttg gaa aga atc aga gta tat atg aac aga 405
His Pro Val Lys Gln Glu Leu Glu Arg Ile Arg Val Tyr Met Asn Arg
85 90 95

gtc aag gaa ata aca gac aag aaa aag gct ggc aag ctg gac aga ggt 453
Val Lys Glu Ile Thr Asp Lys Lys Lys Ala Gly Lys Leu Asp Arg Gly
100 105 110

gca gct tca aga ttt gta aaa aat gcc ctc tgg gaa cca aaa tcg aaa 501
Ala Ala Ser Arg Phe Val Lys Asn Ala Leu Trp Glu Pro Lys Ser Lys
115 120 125

aat gca tca aaa gtt gcc aat aaa gga aaa agt aaa agt taactttttg 550
Asn Ala Ser Lys Val Ala Asn Lys Gly Lys Ser Lys Ser
130 135 140

gttttgatgt acacatatc aaaaagtaca ttaatatgta atcacagtaa tatgtaaagc 610
taaatacttc ctctccaaag atcattatct ttattgatta gcactgagga ttttaacatt 670
gtgatatatt atatatttat aatttaccat ctcttgatga gactcttatt tctttatata 730
ggtcagtctt gcaagtacca ttttataagc agctgtgaaa tttaagtga atgttctttg 790
taaacatttg tactatttta aatgaataat gaccttatga agtatgctat ctgtaggctg 850
aaattatagg tacatctggt ttcactatat gatattaaga aagcgtgaat gacttaaagt 910
ttcatttttt tctgtataga tactttatca tgttttcatg attttaggaa ttactgcttt 970
gttgatatcc aaagtgtgaa actaaaagtt tatgggtgta ctttaattct tggcatgttg 1030
cctctatgtc ccatttaaaa taaaatacat tctcattaac tttagatggg aaataagggt 1090
gtatgttgat ggatgaattt tggcatgatg actgtactct caataaaggc tgaaaatggt 1150

gtaaaa

1156

<210> 2

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Gly Glu Glu Ile Asn Glu Asp Tyr Pro Val Glu Ile His Glu
1 5 10 15

Tyr Leu Ser Ala Phe Glu Asn Ser Ile Gly Ala Val Asp Glu Met Leu
20 25 30

Lys Thr Met Met Ser Val Ser Arg Asn Glu Leu Leu Gln Lys Leu Asp
35 40 45

Pro Leu Glu Gln Ala Lys Val Asp Leu Val Ser Ala Tyr Thr Leu Asn
50 55 60

Ser Met Phe Trp Val Tyr Leu Ala Thr Gln Gly Val Asn Pro Lys Glu
65 70 75 80

His Pro Val Lys Gln Glu Leu Glu Arg Ile Arg Val Tyr Met Asn Arg
85 90 95

Val Lys Glu Ile Thr Asp Lys Lys Lys Ala Gly Lys Leu Asp Arg Gly
100 105 110

Ala Ala Ser Arg Phe Val Lys Asn Ala Leu Trp Glu Pro Lys Ser Lys
115 120 125

Asn Ala Ser Lys Val Ala Asn Lys Gly Lys Ser Lys Ser
130 135 140

<210> 3

<211> 1040

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (78)..(500)

<223> Mouse C1D cDNA

<400> 3

cagaagccgt gtcattggcgt catcatcgtg cgacctatctt cccggagaca ggcgtccacg 60

gtattgagtt ggtcaca atg gca ggt gaa gaa atg aat gaa gat tat ccc 110
Met Ala Gly Glu Glu Met Asn Glu Asp Tyr Pro
1 5 10

gta gaa att cac gag tct tta aca gcc ctg gag agc tcc ctg ggt gct 158
Val Glu Ile His Glu Ser Leu Thr Ala Leu Glu Ser Ser Leu Gly Ala
15 20 25

gtg gac gac atg ctg aag acc atg atg gct gtt tct aga aac gag ttg 206
Val Asp Asp Met Leu Lys Thr Met Met Ala Val Ser Arg Asn Glu Leu
30 35 40

ttg cag aag ttg gac cca ttg gaa caa gca aag gtg gat tta gtt tct 254
Leu Gln Lys Leu Asp Pro Leu Glu Gln Ala Lys Val Asp Leu Val Ser
45 50 55

gca tac acc tta aat tca atg ttt tgg gtt tat ttg gca act caa gga 302
Ala Tyr Thr Leu Asn Ser Met Phe Trp Val Tyr Leu Ala Thr Gln Gly
60 65 70 75

gtt aat ccc aaa gag cat cca gtg aag cag gaa ctg gaa aga atc aga 350
Val Asn Pro Lys Glu His Pro Val Lys Gln Glu Leu Glu Arg Ile Arg
80 85 90

gtc tac atg aac aga gtt aaa gaa ata aca gac aag aag aag gct gcc 398
Val Tyr Met Asn Arg Val Lys Glu Ile Thr Asp Lys Lys Lys Ala Ala
95 100 105

aag ctg gac aga ggt gct gct tcg aga ttt gtc aag aag gca ctc tgg 446
Lys Leu Asp Arg Gly Ala Ala Ser Arg Phe Val Lys Lys Ala Leu Trp
110 115 120

gaa ccc aaa cga aaa agc aca cca aaa gtg gct aat aaa ggg aaa agc 494
Glu Pro Lys Arg Lys Ser Thr Pro Lys Val Ala Asn Lys Gly Lys Ser
125 130 135

aaa cac taatcttttg gttttgatgt acatgttttc aaaaagtaca tcctttttaa 550
Lys His
140

tcagttttaca atgtagttat gtgacatgt ggtgtttaaa tggattcctt ttggaattca 610

tgtataaatt tacacattac atttgtgata ctgaatcttt tttttgctga gaaagattaa 670

gttgtctttg ttgattttca tataaagcat catgatgtgt ttaatattgt aagatattct 730
 ataagcagtt gtgaaatcca aatgttctct gtaaacattt gtagtgtttg aaatgaacaa 790
 tgatattatg aagtgtgcta tctgtagacc tcgaggtgta aggacatttg ttttcagtaa 850
 tgatgagaaa tacagtgact taaataccca ctctgtttct gttcagtttag ttcaacatgt 910
 ttcgtgattt tttttttttt ttgagtaatt ctgtcttgat attcaaagtc aaaattgaaa 970
 ccttaagget gtactttaat tcttcatgtt ccatttaaaa taaaatgttc tcattaactc 1030
 tgatggaaaa 1040

<210> 4
 <211> 141
 <212> PRT
 <213> Mus musculus

<400> 4
 Met Ala Gly Glu Glu Met Asn Glu Asp Tyr Pro Val Glu Ile His Glu
 1 5 10 15
 Ser Leu Thr Ala Leu Glu Ser Ser Leu Gly Ala Val Asp Asp Met Leu
 20 25 30
 Lys Thr Met Met Ala Val Ser Arg Asn Glu Leu Leu Gln Lys Leu Asp
 35 40 45
 Pro Leu Glu Gln Ala Lys Val Asp Leu Val Ser Ala Tyr Thr Leu Asn
 50 55 60
 Ser Met Phe Trp Val Tyr Leu Ala Thr Gln Gly Val Asn Pro Lys Glu
 65 70 75 80
 His Pro Val Lys Gln Glu Leu Glu Arg Ile Arg Val Tyr Met Asn Arg
 85 90 95
 Val Lys Glu Ile Thr Asp Lys Lys Lys Ala Ala Lys Leu Asp Arg Gly
 100 105 110
 Ala Ala Ser Arg Phe Val Lys Lys Ala Leu Trp Glu Pro Lys Arg Lys
 115 120 125
 Ser Thr Pro Lys Val Ala Asn Lys Gly Lys Ser Lys His
 130 135 140

<210> 5
<211> 38
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Forward PCR
Primer for Human cDNA

<400> 5
ggggtaccat ggcaggtgaa gaaattaatg aagactat

38

<210> 6
<211> 38
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse PCR
Primer for Human cDNA

<400> 6
gggtcgactt aacttttact ttttccttta ttggcaac

38

<210> 7
<211> 38
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Forward PCR
Primer for Mouse cDNA

<400> 7
ggggtaccat ggcaggtgaa gaaatgaatg aagattat

38

<210> 8
<211> 38
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse PCR

Primer for Mouse cDNA

<400> 8

gggtcgacgt gtttgctttt ccctttatta gccacttt

38

<210> 9

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Forward PCR
Primer for Enhanced Green Fluorescent Protein

<400> 9

gggtcgacat ggtgagcaag ggcgaggagc tgttc

35

<210> 10

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse PCR
Primer for Enhanced Green Fluorescent Protein

<400> 10

ccaagctttg gaattctaga gtcgcggccg ctta

35